

REMARKS

The Examiner has rejected claims 1, 2, and 4-9 under 35 U.S.C. § 102(b) as being anticipated by Fong et al. U.S. Patent No. 5,812,403 (hereafter the “Fong patent”). Applicants respectfully traverse. Pending claims 1, 8 and 9 and withdrawn claims 10 and 11 have been amended to clarify that the optical emission being monitored is an optical emission radiating from the heated ceramic substrate heater. In accordance with the present invention, a heated ceramic substrate heater gives off a characteristic light or optical emission, and that optical emission will differ depending on whether the heater is coated or uncoated, and depending on the type of coating if the heater is coated. Therefore, by monitoring the light emission that is radiating from the heated ceramic substrate heater in the processing system during the process, and comparing it to a threshold intensity value based on these known characteristic emissions, the process can either be continued or stopped to achieve the desired result.

The Fong patent uses an endpoint detection assembly coupled to the gas outlet of the processing chamber to monitor the absorbance of light by the gas emissions exhausted from the chamber. While these gas emissions may include gas emissions produced as a by-product of the reaction occurring at the heated ceramic substrate surface, the Fong patent does not monitor optical emissions radiating from the ceramic substrate heater. There is a distinct difference between monitoring gas emissions at the outlet of the process chamber or in the exhaust line versus monitoring optical emissions of a system component within the process chamber during a reaction. Based on Examiner’s note at the bottom of Page 2 and carrying over to the top of Page 3, Examiner seems to be equating gas emissions being exhausted from the chamber with optical emissions radiating from the heater within the chamber. The claimed method of monitoring optical emissions radiating from the heated ceramic substrate heater to determine the coating status of the ceramic substrate heater is distinct from the detection system and method disclosed in the Fong patent, and is neither anticipated by nor obvious in view of the teachings and suggestions of the Fong patent. For these reasons, Applicants assert that all pending claims are allowable over the Fong patent. Applicants further request that claims to the withdrawn species be examined on the basis that there

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is an allowable generic claim. Applicants further request Examiner to consider reentering the Group II claims on the grounds that they are closely related to the method claims and do not present an unreasonable burden upon the Examiner to examine the additional claims.

In view of the foregoing amendments to the claims and remarks given herein, Applicants respectfully believe this case is in condition for allowance and respectfully request allowance of the pending claims. If the Examiner believes any detailed language of the claims requires further discussion, the Examiner is respectfully asked to telephone the undersigned attorney so that the matter may be promptly resolved. The Examiner's prompt attention to this matter is appreciated.

Applicants are of the opinion that a two-month extension of time is due with this Amendment and hereby petition therefore. Payment of all charges due for this filing is made on the attached Electronic Fee Sheet. If any additional charges or credits are necessary to complete this communication, please apply them to Deposit Account No. 23-3000.

Respectfully submitted,
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